

The Virginia Annual Recycling Rate Report

Calendar Year 2008 Summary



November 2009

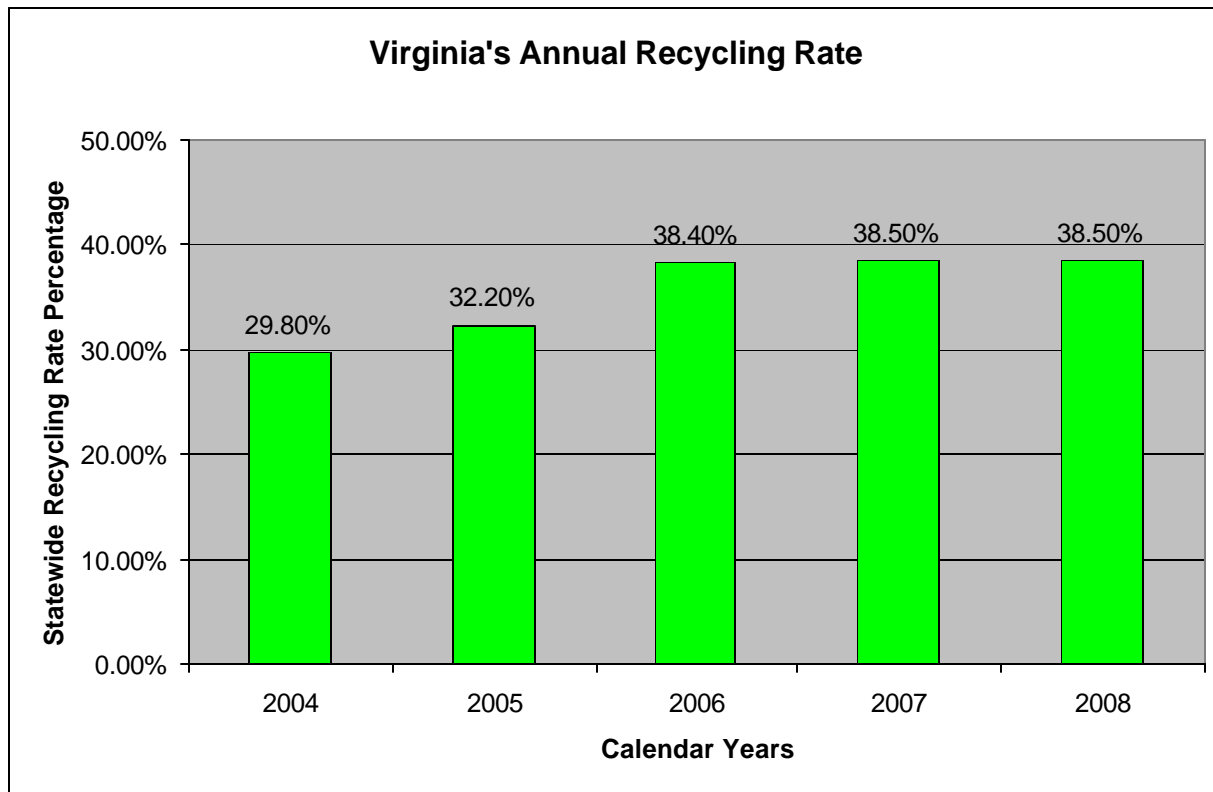
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VIRGINIA'S STATEWIDE RECYCLING RATE

FOR CALENDAR YEAR 2008

The Virginia Department of Environmental Quality (DEQ) has completed its review of the recycling rate data reported for calendar year (CY) 2008. The data for this summary report was compiled from the reports submitted by the 71 solid waste planning units (SWPUs), and represents recycling information from 324 Virginia cities, counties and towns. In some cases, reported data was adjusted for consistency with the Virginia Solid Waste Planning Regulation (9 VAC 20-130 et. seq.).



Statewide Recycling Rate Data - Summary

2008 – 3,661,027 tons of material recycled or reused, and 9,542,428 tons of solid waste generated (calculation includes +.17% for source reduction initiatives)

2007 – 3,637,933 tons of material recycled or reused, and 9,526,959 tons of solid waste generated (calculation includes +.27% for source reduction initiatives)

2006 - 3,700,487 tons of material recycled or reused, and 9,706,554 tons of solid waste generated (calculation includes +.3 % for source reduction initiatives)

2005 - 2,757,442 tons of material recycled or reused, and 8,554,784 tons of solid waste generated

2004 - 2,688,200 tons of material recycled or reused, and 9,016,087 tons of solid waste generated.

Areas Reporting Highest Rates

Higher recycling rates were reported in the more densely populated areas of the state. For CY 2008, these areas reported a total of 3,157,899 recycled tons, or 86 % of all recyclables collected, and had a calculated average recycling rate of 40.6 %. These areas include:

Calculated Regional Recycling Rates by Year				
<u>Area</u>	<u>CY 2008</u>	<u>CY 2007</u>	<u>CY 2006</u>	<u>CY 2005</u>
Bristol Area	39.5%	31.4%	37.8 %	39.4 %
Roanoke Area	33.3%	32.9%	29.6 %	33.9 %
Lynchburg Area	34.0%	40.7%	39.1 %	32.8 %
Northern Shenandoah Valley	33.5%	35.8%	28.8 %	26.0 %
Fredericksburg Area	47.1%	46.5%	40.4 %	30.6 %
Richmond Area	52.8%	53.0%	46.3 %	45.2 %
Northern Virginia	37.1%	35.4%	33.4 %	32.0 %
Hampton Roads/Tidewater Area	31.2%	43.3%	50.9 %	36.1 %

Trends Observed in CY 2008 Reports

In reviewing the statewide totals from the recycling rate reports, the following trends were observed:

- Principal Recyclable Materials* (PRMs) decreased overall by 4.2%; Credits* increased overall by 19.7%; Municipal Solid Waste* (MSW) disposed decreased by 0.1%.

** PRMs, Credits and MSW disposed are defined on Page 9 of this report.*

As a subset of the PRM category, the commodity capture rates changed as indicated:

- | | | |
|---------------|--------|-----------------------------|
| • Paper | 5.0 % | decrease from CY 2007 level |
| • Metals | 5.8 % | decrease from CY 2007 level |
| • Plastics | 39.3 % | decrease from CY 2007 level |
| • Glass | 40.1 % | decrease from CY 2007 level |
| • Commingled | 59.1 % | increase from CY 2007 level |
| • Used oil | 13.0 % | decrease from CY 2007 level |
| • Electronics | 48.7 % | increase from CY 2007 level |

The statewide recycling rate remained level at 38.5 % from CY 2007 to CY 2008 as a result of the increased reporting of the reuse or recycling of non-PRM materials in the Credits category, and the increased level of material collected via single-stream or commingled systems.

SWPUs Meeting the Required Rate

In each of the last five reporting years, more of the reporting entities have met the required recycling rate:

<u>Year (% meeting rate)</u>	<u># Reports</u>	<u>25 % or Greater</u>	<u>15% to 25 %</u>	<u># below mandated recycling rate</u>
CY 2003 (35 %)	96	34	n/a	62
CY 2004 (48 %)	95	46	n/a	49
CY 2005 (61 %)	74	45	n/a	29
CY 2006 (86 %)	74	46	18	10
CY 2007 (89 %)	74	49	19	8
CY 2008 (97 %)	71 *	48	21	2

** The reduction in number of reports submitted is due to consolidation and re-alignment of SWPU membership.*

Each SWPU is required to achieve a minimum 25 % recycling rate *unless*

- its population density is less than 100 persons per square mile, or
- its civilian unemployment rate is 50 % or more above the state wide unemployment average.

SWPUs meeting these criteria were required to achieve a minimum 15 % recycling rate. Using this two-tiered recycling mandate standard, 69 of the 71 SWPUs (or 97 %) met or exceeded their minimum mandated recycling rate.

Solid Waste Management Planning and Recycling Action Plans

DEQ continues to review the required Solid Waste Management Plans (SWMPs) submitted by the SWPUs for completeness, including locality or regional recycling program information. For the plans already reviewed and in which the SWPU reports less than the required 15 % or 25 % recycling rate, DEQ will require a Recycling Action Plan (RAP) to identify specific elements of the recycling program that will be changed or improved in order for the SWPU to reach its recycling rate.

A RAP requires both a commitment by the SWPU to provide resources necessary to improve its program, as well as a timeline for achieving the program elements. The RAP must be adopted by the administrative governmental board(s) for all localities covered by the Solid Waste Management Plan, and then approved by DEQ. Regular reporting on the progress

made on the RAP elements is required until such time as the SWPU meets its minimum required recycling rate.

NOTE: Recycling Data Clarification

The Technical Advisory Committee (TAC) studying changes in the recycling requirements as a component of the *Regulations for Solid Waste Management Planning* (<http://www.deq.virginia.gov/waste/wastereg130.html>) due to the 2006 legislation requested this clarification be included in the annual report:

“Due to the complexity and difficulty in obtaining data, this report reflects the best efforts of the planning units to represent recycling in Virginia.”

In addition, the TAC encouraged the reporting of recycling data by all sectors in order to make these numbers as representative of the actual condition as possible:

“Entities engaged in the collection, processing and marketing of recyclable materials should provide data for incorporation into the recycling rate calculation, when requested by the planning unit.”

Calculated Recycling Rates for CY 2008

Solid Waste Planning Unit Recycling Rates and Data

REPORTING ENTITY (Solid Waste Planning Units)	CY 2008 Recycling Rate* (%)	CY 2008 Total Recycled Tons (PRMs + Credits)	CY 2008 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Statewide Totals	38.5 %	3,661,027	9,542,428
Accomack County SWPU	23.4 *	18,202	50,747
Alexandria (City) SWPU	26.9	53,215	197,779
Alleghany Highlands SWPU	26.2 *	8,448	24,978
Amelia County SWPU	31.0	3,025	9,767
Amherst County SWPU	21.3	6,557	30,805
Arlington County SWPU	42.5 *	121,045	267,977
Augusta –Staunton-Waynesboro SWPU	27.6	36,553	132,675
Bath County SWPU	17.0	929	5,459
Bedford County SWPU	43.3 *	28,844	69,852
Botetourt County SWPU	13.1 *	16,981	37,343
Bristol (City) SWPU	39.5	9,813	24,840
Brunswick County SWPU	20.2	3,626	17,926
Buckingham County SWPU	36.3	5,552	15,295
Caroline County SWPU	10.4	1,259	12,165
Carroll-Grayson-Galax SWPU	32.9	14,126	42,984
Central Virginia Waste Management Authority SWPU (Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, Prince George; Cities of Richmond, Hopewell, Colonial Heights and Petersburg)	52.8 *	753,340	1,225,952

REPORTING ENTITY (Solid Waste Planning Units)	CY 2008 Recycling Rate* (%)	CY 2008 Total Recycled Tons (PRMs + Credits)	CY 2008 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Craig County SWPU	24.2	875	3,618
Culpeper County SWPU	25.0 *	13,307	42,442
Cumberland Plateau Regional Waste Management Authority SWPU (Buchanan, Dickenson and Russell Counties)	40.6	33,438	82,406
Danville (City) SWPU	40.5	10,659	26,300
Fairfax (City) SWPU	40.0	19,588	48,960
Fairfax County SWPU	40.1 *	491,113	1,290,329
Falls Church (City) SWPU	59.3 *	8,602	15,003
Fauquier County SWPU	31.4	49,674	133,138
Floyd County SWPU	17.8	3,044	14,353
Franklin County SWPU	32.1	16,052	50,081
Gloucester County SWPU	31.5	14,329	45,478
Greater Rockingham SWPU	26.5	12,299	46,346
Harrisonburg (City) SWPU	28.3	20,432	72,265
Herndon (Town) SWPU	41.9	11,240	26,850
Highland County SWPU	17.9	355	1,981
King George County SWPU	20.3 *	82,584	99,895
Lee County SWPU	19.8	4,030	20,310
Loudoun County SWPU	32.7	96,011	293,737
Louisa County SWPU	28.3	7,608	26,891

REPORTING ENTITY (Solid Waste Planning Units)	CY 2008 Recycling Rate* (%)	CY 2008 Total Recycled Tons (PRMs + Credits)	CY 2008 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Lunenburg County SWPU	22.6	2,843	12,592
Madison County SWPU	24.4	2,367	9,692
Manassas (City) SWPU	38.5	27,574	71,548
Manassas Park (City) SWPU	28.5 *	3,919	12,382
Martinsville (City)/Henry County SWPU	31.9	27,931	87,610
Montgomery Regional Solid Waste Authority SWPU (Montgomery County, Blacksburg and Christiansburg)	27.1	23,889	88,067
Mount Rogers PDC SWPU (Counties of Bland, Smyth, Washington, and Wythe)	25.9	25,036	90,295
Newport News (City) SWPU	26.1 *	167,639	328,254
New River Resource Authority SWPU (Counties of Pulaski and Giles; City of Radford)	19.7	17,367	87,935
Northampton County SWPU	18.4	3,201	17,411
Northern Neck PDC SWPU (Counties of Lancaster, Northumberland, Richmond and Westmoreland)	16.2	8,237	50,960
Northern Shenandoah Valley Regional Commission SWPU (Counties of Clarke, Frederick, Shenandoah, Warren and Page; City of Winchester)	33.5	75,739	225,808
Nottoway County SWPU	24.5	6,017	24,600
Orange County SWPU	16.1	8,343	27,170
Patrick County SWPU	38.9	5,977	15,361
Pittsylvania County SWPU	28.0	12,260	43,836
Prince Edward - Cumberland SWPU	27.5	6,058	22,019

REPORTING ENTITY (Solid Waste Planning Units)	CY 2008 Recycling Rate* (%)	CY 2008 Total Recycled Tons (PRMs + Credits)	CY 2008 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Prince William County SWPU	35.4 *	152,678	437,776
Rappahannock County SWPU	17.9	1,598	8,928
Rappahannock Regional Solid Waste Management Board SWPU (County of Stafford and City of Fredericksburg)	46.7	72,021	154,256
Region 2000 (Counties of Nelson, Appomattox and Campbell, Cities of Lynchburg and Bedford)	32.7 *	116,647	346,387
Roanoke (City) SWPU	45.2	38,703	85,654
Roanoke County SWPU	26.2	17,775	67,931
Rockbridge – Lexington – Buena Vista SWPU	39.0	13,503	34,666
Salem (City) SWPU	47.5	19,857	41,803
Scott County SWPU	19.1	3,069	16,037
Southeastern Public Service Authority SWPU (Counties of Isle of Wight and Southampton; Cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk, and Virginia Beach)	28.9 *	490,757	1,589,094
Southern Crater Region SWPU (Counties of Dinwiddie, Greensville, Surry, and Sussex; City of Emporia)	18.1 *	15,845	74,031
Southside Regional PSA SWPU (Counties of Charlotte, Halifax and Mecklenburg)	15.4	8,510	55,100
Spotsylvania County SWPU	41.3	44,595	108,008
Tazewell County SWPU	19.5	12,931	66,264
Thomas Jefferson PDC SWPU (Counties of Albemarle, Fluvanna, and Greene; City of Charlottesville)	28.3	57,134	217,183
Vienna (Town) SWPU	53.9	6,087	11,284

REPORTING ENTITY (Solid Waste Planning Units)	CY 2008 Recycling Rate* (%)	CY 2008 Total Recycled Tons (PRMs + Credits)	CY 2008 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Vinton (Town) SWPU	44.3 *	4,407	8,450
Virginia Peninsulas Public Service Authority SWPU (Counties of Essex, James City, King & Queen, Mathews, Middlesex, and York; Cities of Hampton, Poquoson, and Williamsburg)	37.8 *	165,539	437,879
Wise County SWPU	30.8	18,221	59,233
STATEWIDE TOTALS CY 2008	38.5 %	3,661,027 Tons	9,542,428 Tons

* All data based on adjustments by DEQ for consistency with 9VAC-20-130-10 and 9VAC20-130-120, with a 5 % maximum percentage allowed for credits to the base recycling rate calculated by a solid waste planning unit. A 2 % source reduction credit may have been added to the calculated recycling rate for a documented source reduction program.

PRMs = Principal Recyclable Materials (paper, metal, plastic, glass, commingled materials, yard waste, waste wood, textiles, waste tires, used oil, used oil filters, used antifreeze, inoperative automobiles, batteries, electronics and other)

CREDITS = Recycling Residues, Solid Waste Reused, and Non-MSW Recycled (includes construction and demolition material, ash and debris), and Source Reduction Initiatives. Source Reduction Initiatives must be documented as SWPU policy and promoted across the SWPU.

MSW Disposed = Municipal solid waste delivered to sanitary landfills or incinerators for disposal.

Recycling Rate Report Summary

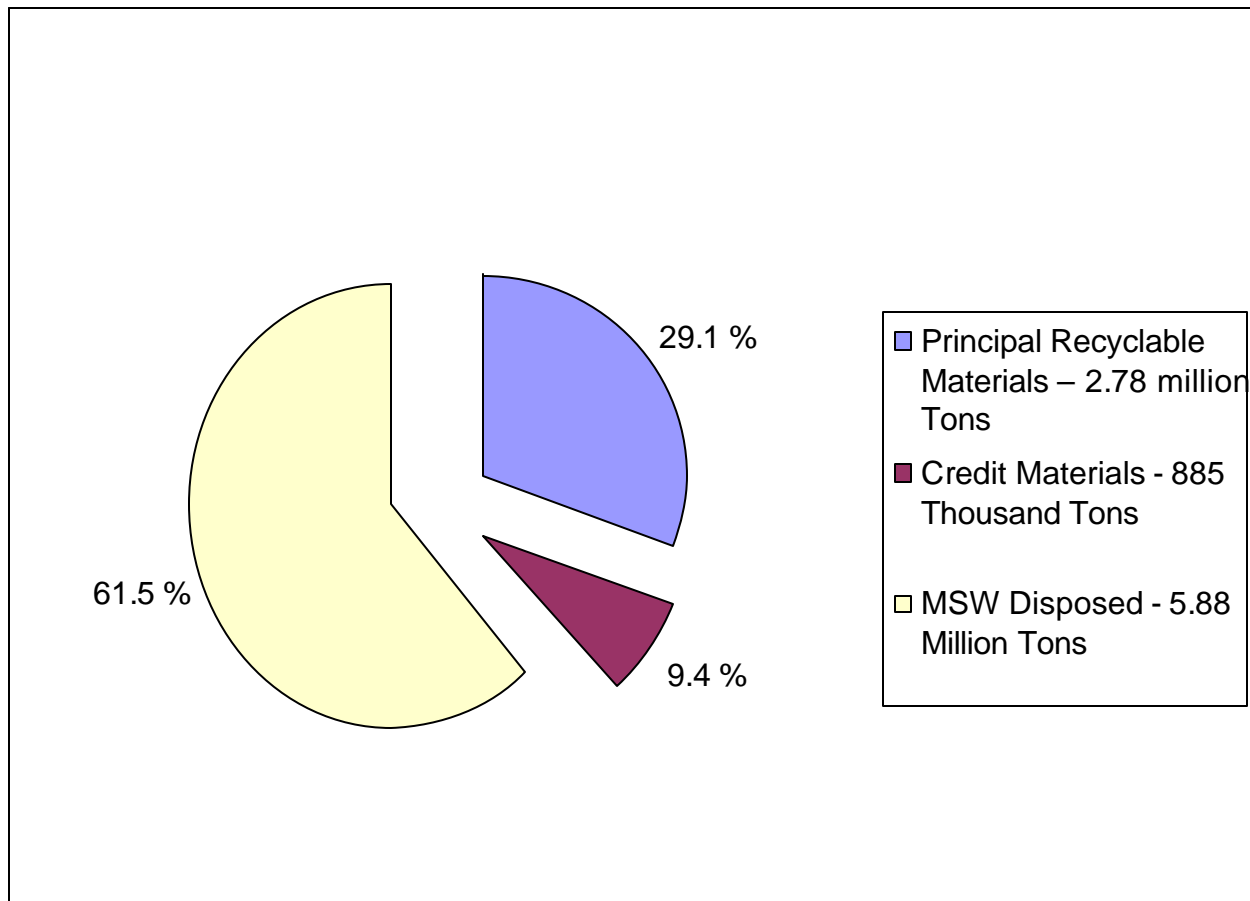
Virginia Solid Waste Planning Units Reporting Rate Information for CY 2008

71 Recycling Rate Reports, representing **324 Virginia localities** and every **Solid Waste Planning Unit**, were received. This represents a return rate of 100 %. Totals for all reports are presented below:

Principal Recyclable Material (PRM)				Total MSW Disposed	
Paper	872,416	Credits		Household Waste	4,239,713
Metal	718,219	Recycling Residue	9,082	Commercial Waste	1,465,130
Plastic	29,143	Solid Waste Reused	800,530	Institutional Waste	108,852
Glass	26,526	Non-MSW Recycled	76,073	Other:	67,706
Commingled	176,440	TOTAL CREDITS (C) (Tons)	885,684	TOTAL MSW (M) (Tons)	5,881,400
Yard Waste	473,655				
Waste Wood	262,714				
Textiles	28,550				
Waste Tires	67,161				
Used Oil	46,027	2 % Source Reduction Credit	6 entities, equaling .17% overall		
Used Oil Filters	2,008				
Used Antifreeze	4,332			State Recycling Rate	
Auto Bodies	8,380		((P+C)/(P+C+M) x 100) + Source Reduction Credit (3,661,027/9,542,428)X100)+ .17%	38.5 %	
Batteries	18,310				
Electronics	4,581				
Other:	36,611				
Total PRM (P) (Tons)	2,775,343	(rounding of individual data entries may affect sums in Totals)			

RECYCLING IN VIRGINIA, CY 2008

Statewide Recycling Rate of 38.5 %



PRMs = Principal Recyclable Materials (paper, metal, plastic, glass, commingled materials, yard waste, waste wood, textiles, waste tires, used oil, used oil filters, used antifreeze, inoperative automobiles, batteries, electronics and other)

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